

Water Words

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Parts per billion:

The number of weight or volume units of a substance in each billion units of a solution or mixture.

Parts Per Million:

The number of weight or volume units of a substance in each million units of a solution or mixture.

Pathogen:

A disease-producing agent; generally, any viruses, bacteria, or fungi that cause disease in humans, animals, and plants.

Pentachlorophenol:

Toxic substance usually used as a wood preservative.

Perchloroethylene:

A chlorinated solvent commonly used in dry cleaning. Also known as tetrachloroethylene.

Perched water:

Zone of unpressurized water held above the water table by impermeable rock or sediment.

Percolating water:

Water that passes through rocks or soil under the force of gravity.

Percolation:

1. The movement of water downward and radically through subsurface soil layers, usually continuing downward to ground water. Can also involve upward movement of water. 2. Slow seepage of water through a filter.

Permeability:

The capacity of a rock or soil to transmit a fluid, usually water.

Permit:

A set of WDRs adopted by a Regional Water Board or the State Water Board. and subject to public review and comment before final action (see also NPDES Permit, WDRs); e.g., a permit to operate a wastewater treatment plant.

Petroleum derivatives:

Chemicals formed when gasoline breaks down in contact with water.

pH:

A measure of the intensity of the basic or acidic condition of a liquid. It may range from 0 to 14, where 0 is the most acidic and 7 is neutral.

Natural waters usually have a pH between 6.5 and 8.5.

Phenolphthalein alkalinity:

The alkalinity in a water sample measured by the amount of standard acid needed to lower the pH to a level of 8.3 as indicated by the change of color of the phenolphthalein from pink to clear.

Phenols:

Organic compounds that are byproducts of petroleum refining; tanning; and textile, dye, and resin manufacturing. Low concentrations cause taste and odor problems in water; higher concentrations can kill aquatic life and humans.

Phosphorus:

An essential chemical food element that can contribute to the eutrophication of lakes and other water bodies. Increased phosphorus levels result from discharge of phosphorus-containing materials into surface waters.

Physical and chemical treatment:

Processes generally used in large-scale wastewater treatment facilities. Physical processes may include air-stripping or filtration. Chemical treatment includes coagulation, chlorination, or ozonation (the treatment or combination of a substance or compound with ozone). The term can also refer to treatment of toxic materials in surface and ground waters, oil spills, and some methods of dealing with hazardous materials on or in the ground.

Peak Stream Flow:

The maximum expected flow of surface water from a tributary watershed for a given recurrence interval.

Piezometer:

A nonpumping well, generally of small diameter, for measuring the elevation of a water table.

Pesticide:

A chemical used to kill destructive insects or other small animals (generally includes herbicides).

Pesticide Regulation, Department of (DPR):

State agency responsible for registration and regulation of chemical pesticides. DPR's requirements are in addition to U.S. EPA's. Programs include monitoring for chemicals that may enter state waters. (See also Federal Insecticide, Fungicide & Rodenticide Act)

Plankton:

Tiny plants and animals that live in water.

Plug flow:

Type of flow that occurs in tanks, basins, or reactors when a slug of water moves through without ever dispersing or mixing with the rest of the water flowing through.

Plugging:

Act or process of stopping the flow of water, oil, or gas into or out of a formation through a borehole or well penetrating that formation.

Point source:

A discharge point subject to the Clean Water Act's NPDES program; a point source is any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, and well. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant minimization program:

Waste minimization and pollution prevention actions including product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses.

Pollution:

Generally, the presence of a substance in the environment that, because of its chemical composition or quantity, prevents the functioning of natural processes and produces undesirable environmental and health effects. Under the Porter Cologne Act, pollution is defined as an alteration of the quality of waters of the state to a degree that unreasonably affects the waters for beneficial uses, or facilities, which serve those beneficial uses.

Polychlorinated biphenyls (PCBs):

Toxic industrial chemical compound substances that were used in the manufacture of plastics and as insulating fluids in electrical transformers and capacitors. Banned since 1979, PCBs continue to be found in fish/animals.

Porosity:

Degree to which soil, gravel, sediment, or rock is permeated with pores or cavities through which water or air can move.

Porter Cologne Water Quality Control Act (Porter Cologne Act):

Anti-pollution legislation enacted by the California Legislature in 1970. It provides a framework for the regulation of waste discharges to both surface and ground waters of the state. It further provides for the adoption of water quality control plans; and the implementation of these plans by adopting waste discharge requirements for individual dischargers or classes of dischargers.

Potable water:

Water that is safe for drinking and cooking. (See Non-potable water)

Potential dose:

The amount of a compound contained in material swallowed, breathed, or applied to the skin.

Potentially Responsible Party (PRP):

Informal term given to the subject of a Regional Board's cleanup investigation. A PRP may be asked by a Regional Board to furnish a technical report, perform clean up activities, or perform other obligations related to the discharge.

Potentiometric surface:

The surface to which water in an aquifer can rise by hydrostatic pressure.

Pretreatment:

Processes used to reduce, eliminate, or alter the nature of wastewater pollutants from non-domestic sources before they are discharged into publicly owned treatment works (POTWs).

Primary treatment:

(See Sewage treatment)

Prior appropriation:

A doctrine of water law that allocates the rights to use water on a first in time, first in right, basis. Since 1914, appropriative rights to surface water or underground streams in known and definite channels could be obtained only through compliance with the statutory system for water right permits and licenses.

Process verification:

Verifying that raw materials, water usage, waste treatment processes, production rate and other facts relative to quantity and quality of pollutants contained in discharges are substantially described in the permit application and the issued permit.

Process wastewater:

In the context of point source discharges, process wastewater is any water, which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Products of Incomplete Combustion (PICs):

Organic compounds formed by combustion. Usually generated in small amounts and sometimes toxic, PICs are heat-altered versions of the original material fed into the incinerator (e.g., charcoal is a PIC. from burning wood).

Proposed plan:

A plan for a site cleanup that is available to the public for comment.

Proposition 13 (2000 Water Bond):

Authorized the State of California to sell \$1.97 billion in general obligation bonds to fund projects that support safe drinking water, water quality, flood protection and water reliability projects statewide.

Public Water System:

A system that provides piped water for human consumption to at least 15 service connections or regularly serves 25 individuals.

Publicly-Owned Treatment Works: (POTWs)

A wastewater treatment plant that is owned by a state, unit of local government or Indian tribe, usually designed to treat domestic wastewaters. The term also may include devices and systems used by those entities in the storage, treatment, recycling and reclamation of municipal sewage or liquid industrial wastes.

Public Records Act:

Enacted by the California Legislature in 1967 to ensure that citizens could gain prompt access to government records and documents upon request. Government agencies have 10 working days to respond in writing to a Public Records Act request.

Pumping station:

Mechanical device installed in sewer or water system or other liquid-carrying pipelines to move the liquids to a higher level.

Pumping test:

A test conducted to determine aquifer or well characteristics.

Purging:

Removing stagnant air or water from sampling zone or equipment prior to sample collection.